

Observations of Comets made at the Royal Observatory, Blackford Hill, Edinburgh.

(Communicated by the Astronomer Royal for Scotland.)

The following observations were made by Dr. J. Halm with the 15-inch Dunecht Refractor and the wire micrometer, except the second observation of December 11, which was made by Professor Copeland.

The adopted position of the new Transit House is

Lat. $+55^{\circ} 55' 28''.0$.

Long. West $12^m 44^s.2$.

The 15-inch Refractor stands $0^s.2$ east of the Transit House.

Swift (1895 Aug. 20).

1895.	M.T. Edinburgh.	(δ -*) $\Delta\alpha$.	(δ -*) $\Delta\delta$.	No. of Comp.	α App.	Log $p\Delta$.	δ App.	Log $p\Delta$.	Reduction to App. Pl.	*
		$\begin{smallmatrix} h & m & s \\ \hline \end{smallmatrix}$	$\begin{smallmatrix} ' & '' \\ \hline \end{smallmatrix}$		$\begin{smallmatrix} h & m & s \\ \hline \end{smallmatrix}$		$\begin{smallmatrix} ^\circ & ' & '' \\ \hline \end{smallmatrix}$		$\begin{smallmatrix} s \\ \hline \end{smallmatrix}$	
Oct. 16	11 3 49	-0 34.02	-2 39.7	18, 7	1 26 34.70	8.786n	+3 40 24.0	0.848	+3.97	+27.3
17	9 45 9	-0 28.46	-5 4.0	36, 12	1 26 40.27	9.214n	+3 37 59.7	0.851	+3.98	+27.3
18	10 52 41	-0 33.26	...	24, 0	1 26 45.60	8.788n	+3.99	
18	10 59 6	...	+2 17.5	0, 9	+3 35 36.7	0.849	+27.3	

Perrine (1895 Nov. 16).

Nov. 18	18 13 29	+7 27.78	-3 52.2	9, 3	13 48 15.32	9.442n	+0 48 18.7	0.866	+1.90	-17.0
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Brooks (1895 Nov. 21).

Dec. 7	9 8 48	-2 42.30	...	15, 0	8 21 36.06	9.644n	+5.63	...
8	11 13 11	...	-1 16.8	0, 3	+45 2 55.3	0.513	...	-13.5
9	9 55 12	+1 42.01	-1 28.3	18, 9	7 57 29.81	9.683n	+48 36 38.6	0.572	+6.51	-12.0
9	11 57 11	+1 16.17	+2 29.0	10, 5	7 56 23.71	9.527n	+48 55 14.2	0.303	+6.53	-11.9
11	8 39 7	-2 49.88	+0 3.8	20, 10	7 50 9.03	9.762n	+54 59 41.7	0.567	+7.43	-9.2
11	9 56 12	-0 41.20	+6 37.0	4, 4	7 29 19.74	9.717n	+55 9 17.6	0.370	+7.45	-8.8
11	11 34 16	-1 41.81	-5 10.9	12, 6	7 28 17.15	9.560n	+55 21 7.0	0.976	+7.51	-8.9
13	11 2 27	-1 7.95	+4 23.9	14, 7	6 56 2.04	9.600n	+60 21 24.9	0.088	+8.50	-3.6
20	8 33 57	+0 45.76	+5 18.9	10, 8	4 49 46.78	9.711n	+68 28 38.4	0.049n	+10.05	+19.7

March 1896.

Observations of Comets.

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Mean Places of Comparison Stars.

No.	α 1895 o.	δ 1895 o.	Authority.
	h m s	$^{\circ}$ ' "	
1	1 27 47.5	+3 42 36.4	A.G.Z. Albany.
2	1 27 14.87	+3 32 51.9	" "
3	13 40 45.64	+0 52 27.9	" "
4	8 24 12.73	+40 34 37.1	A.G.Z. Bonn.
5	8 10 23.53	+45 4 25.6	" "
6	7 55 41.29	+48 38 18.9	" "
7	7 55 1.01	+48 52 57.1	" "
8	7 32 51.48	+54 59 47.1	A.G.Z. Hels. Gotha.
9	7 29 56.49	+55 2 49.4	Comp. with A.G.Z. Hels. Gotha, 5.77.
10	7 29 51.45	+55 26 26.8	A.G.Z. Hels. Gotha.
11	6 57 1.49	+60 17 4.6	" "
12	4 48 50.97	+68 22 59.8	A.G.Z. Christiania.

Notes.

Comet *Swift* was always very faint and without a distinct nucleus.

Comet *Perrine* bright, with a nucleus of about sixth magnitude and a tail extending due north.

Comet *Brooks* exceedingly faint and of irregular outline; very difficult to observe on account of its want of any precise nucleus.

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Observations of Comets made at the Royal Observatory, Blackford Hill, Edinburgh (15-inch Refractor and Wire Micrometer).

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☞ Perrine (1895 Nov. 16).

1896.	M.T. Edinburgh. h m s	(Δ — \star) Δ a. m s	(Δ — \star) Δ δ. ' " "	No. of Comp.	a App. h m s	Log pΔ.	δ App. ° ' " "	Log pΔ.	★
Feb. 23	17 44 38	—0 39'34	—0 46'1	14, 6	19 46 34'26	9'442 ⁿ	+ 0 21 58'2	0'860	1
Mar. 1	16 36 38	+1 31'12	—0 57'3	21, 7	19 46 52'84	9'484 ⁿ	+ 2 15 38'3	0'858	2
3	16 30 31	—0 22'14	+6 49'8	36, 12	19 46 48'69	9'483 ⁿ	+ 2 48 23'2	0'857	3
9	16 29 19	—2 31'90	+2 36'3	36, 12	19 46 9'59	9'460 ⁿ	+ 4 27 24'6	0'851	4

☞ Perrine-Lamp (1896 Feb. 14).

Mar. 3	10 14 55	—1 58'36	—5 39'7	21, 7	1 6 59'69	9'670	+51 45 16'1	0'807	5
3	17 15 31	+1 43'86	—1 31'3	21, 7	1 12 57'53	9'562 ⁿ	+51 46 26'4	0'867	6
5	9 14 32	—0 34'94	+7 16'6	21, 7	1 43 12'65	9'723	+51 34 27'8	0'699	7
5	9 46 46	—0 41'95	+8 37'0	18, 6	1 43 34'57	9'711	+51 34 8'2	0'744	8
6	7 7 30	+0 39'00	+5 2'2	6, 2	1 57 23'96	9'672	+51 18 22'0	0'443	9
6	10 39 15	+1 59'95	+3 21'4	18, 6	1 59 32'59	9'681	+51 15 10'8	0'793	10
8	11 7 20	+4 23'22	—3 49'2	18, 6	2 25 24'93	9'663	+50 25 45'8	0'808	11
9	7 39 51	—0 56'62	+0 58'8	24, 8	2 34 37'93	9'667	+50 2 25'6	0'483	12
9	9 10 37	—1 12'56	+3 49'8	24, 8	2 35 16'69	9'711	+50 0 38'4	0'653	13
9	10 26 33	+0 14'41	—2 17'5	5, 5	2 35 48'96	9'695	+49 59 9'3	0'758	12

Mean Places of Comparison Stars.

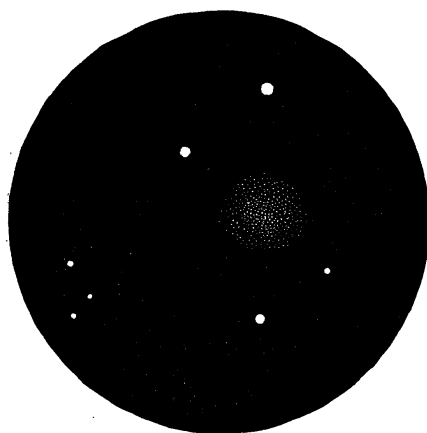
No.	<i>a</i> 1896'o.			<i>δ</i> 1896'o.			Reduction to app. place.	Authority.
	h	m	s	°	'	"		
1	19	47	13.64	+	0	22 56.5	-0.04 -12.2	Schj.
2	19	45	21.62	+	2	16 48.6	+0.10 -13.0	Bonn. Obs. 1855.
3	19	47	10.66	+	2	41 46.5	+0.17 -13.1	A.G.Z. Albany.
4	19	48	41.23	+	4	25 1.9	+0.26 -13.6	„ „
5	1	8	59.21	+	51	50 43.1	-1.16 +12.7	A.G.Z. Camb. Mass.
6	1	11	14.81	+	51	47 44.9	-1.14 +12.8	„ „
7	1	43	48.44	+	51	26 56.4	-0.85 +14.8	„ „
8	1	44	17.37	+	51	25 16.4	-0.85 +14.8	„ „
9	1	56	45.69	+	51	13 4.3	-0.73 +15.5	„ „
10	1	57	33.37	+	51	11 33.9	-0.73 +15.5	„ „
11	2	21	2.21	+	50	29 18.6	-0.50 +16.4	„ „
12	2	35	34.90	+	50	1 9.9	-0.35 +16.9	A.G.Z. Bonn.
13	2	36	29.59	+	49	56 31.7	-0.34 +16.9	„ „

Comet Perrine very faint on March 3 and 9.
Comet Perrine-Lamp bright and highly condensed towards the centre, but without a distinct nucleus.
The observations were made by Dr. J. Halm, except the last measure, on March 9, which was made by Professor Copeland.

Royal Observatory, Blackford Hill :
1896 March 12.

Discovery and Observations of Comet Brooks (d 1895).
By W. R. Brooks.

I have the honour to communicate to the Society some notes on the discovery and observations of my comet of November 21. While sweeping the south-eastern heavens with the 10-inch equatorial, at about 14 hours, standard 75th meridian time, I picked up a large nebulous mass, which I at once recognised as new.



Discovery field. Comet Brooks.

The discovery place was R.A. $9^{\text{h}} 51^{\text{m}} 50^{\text{s}}$, Decl. S. $17^{\circ} 40'$.

I give herewith a chart of the discovery field.

In a few minutes after securing the discovery position the sky, which up to that time had been remarkably clear, became clouded, but fortunately not before I had detected motion, which proved to be rapid and in a northerly direction. For over an hour not a star was to be seen in any part of the heavens, but by the driving-clock the telescope was kept on the object, hoping for a break in the clouds. This came in about an hour, and the direction of the comet's motion was ascertained beyond a doubt. The morning was intensely cold, the thermometer standing at 10° above zero, and when a little later I went down to the telegraph office, about one mile distant, to announce the discovery, it was snowing furiously.

Nearly a week of storms and cloudy weather followed, so that it was not until the sixth morning after the discovery that I was able to secure another observation of the comet.

It had in this interval, with its rapid motion of three degrees daily, moved over a great distance, so that on the morning of November 27, $15^{\text{h}} 40^{\text{m}}$, it was observed in R.A. $9^{\text{h}} 29^{\text{m}} 30^{\text{s}}$; Decl. N. $0^{\circ} 47'$; and the comet appeared larger and brighter than at discovery.